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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,351	11/07/2005	Ichiro Hayashida	052512	4814

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EXAMINER	
WEBB, GREGORY E	

ART UNIT	PAPER NUMBER
1796	

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05/15/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/534,351	HAYASHIDA ET AL.	
	Examiner	Art Unit	
	Gregory E. Webb	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 5-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-3, 5, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawase (US 20060151854). Kawase teaches polishing compositions with a pH from 8-12 (see claim 14), the claimed chelating agents (see claim 13) and the alkali component (see par 21). Noting also that many of the alkali cited would also act as buffers as per instant claim 5.

Concerning the claimed chelating agent, Kawase, Akihiro teaches the following:

13. The rinsing composition according to claim 9, wherein the chelating" agent contains at least one compound selected from" **ethylenediaminetetraethylenephosphonic** acid," **ethylenediaminetetramethylenephosphonic** acid," **diethylenetriaminepentaethylenephosphonic** acid," **diethylenetriaminepentamethylenephosphonic** acid," **triethylenetetraminehexaethylenephosphonic** acid," **triethylenetetraminehexamethylenephosphonic** acid," **propanediaminetetraethylenephosphonic** acid and" **propanediaminetetramethylenephosphonic** acid, and ammonium salts," potassium salts, sodium salts and lithium salts of these acids."

Concerning the claimed alkaline metal hydroxide, Kawase, Akihiro teaches the following:

[0021] Specific examples of the alkali compound may include inorganic" alkali compounds such as **potassium hydroxide** (PHA), **sodium hydroxide**" (NHA), potassium hydrogen carbonate (PCAH), potassium carbonate (PCA)," sodium hydrogen carbonate (NCAH) and sodium carbonate (NCA); ammonia" (AM); ammonium salts such as tetramethyl ammonium hydroxide (TMAH)," ammonium hydrogen carbonate (ACAH) and ammonium carbonate (ACA); and" amines such as methylamine (MA), dimethylamine (DMA), trimethylamine" (TMA), ethylamine (EA), diethylamine (DEA), triethylamine (TEA)," ethylenediamine (EDA), monoethanolamine (MEA)," N-(.beta.-aminoethyl)ethanolamine (AEEA), hexamethylenediamine (HMDA)," diethylenetriamine (DETA), triethylenetetramine (TETA), piperazine" anhydride (PIZ), piperazine hexahydrate, 1-(2-aminoethyl)piperazine" (AEPIZ) and N-methylpiperazine (MPIZ). Because of having low amine odor," preferable examples of the alkali compound may include PHA, NHA, PCAH," PCA, NCAH, NCA, AM, TMAH, ACAH, ACA, EDA, MEA, AEEA, HMDA, DETA, TETA," PIZ, piperazine hexahydrate, AEPIZ and MPIZ. Because the alkali compound" does not inhibit the functions of the chelating agent in addition to" having a low amine odor, more preferable examples thereof may include" PHA, NHA, PCAH, PCA, NCAH, NCA, AM, TMAH, ACAH, ACA, PIZ, piperazine" hexahydrate, AEPIZ and MPIZ. The polishing composition and the rinsing" composition may contain one kind of the alkali compounds or two or more" kinds thereof."

4. Claims 1-3, 5, 6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ota (US 6287371). Ota teaches gold plating compositions containing a

complexation agent and a nitrogen containing compound (see claim 1). Ota further teaches the complexation agent to contain a phosphonic acid group.

Concerning the claimed chelating agent, Ota, Yasuo teaches the claimed complexing agent in example 1:

Ethylenediaminetetramethylenephosphonic acid 0.15 mole/L"

Concerning the claimed buffering agent, Ota, Yasuo teaches the following:

A non-electrolytic gold substitution plating liquid in the present invention can be mixed with a pH stabilizing agent. Salt of phosphoric acid, phosphorous acid, **boric acid** and carboxylic acids may be used as such an agent."

Concerning the phosphonic, and claimed alkaline metal hydroxide, Ota, Yasuo teaches the following:

For adjustment of pH of the non-electrolytic gold substitution plating liquid in the present invention, for example, **sodium hydroxide**, **potassium hydroxide**, ammonia, sulfuric acid, sulfurous acid, hydrochloric acid, phosphoric acid, sulfamic acid," organosulfonic acids, **phosphonic** acids and carboxylic acids may be used."

5. Claims 1-3, 5, 6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Severson (US 4537706). Severson teaches liquid detergents containing boric acid as a stabilizing agent as well as 0.1-1% of the phosphonic chelating agent (see claim 7).

Concerning the claimed buffering agent, Severson, Jr. teaches the following:

While many different enzyme stabilizers have been proposed in the art, the combination of **boric acid** and calcium ion, preferably with a polyol, provides unexpectedly good stability in the present compositions."

Concerning the phosphonic, and claimed chelating agent, Severson, Jr. teaches the following:

Preferred aminopolyphosphonate builders are the sodium and potassium salts of **diethylenetriaminepentamethylenephosphonic** acid, hexam**ethylenediaminetetramethylenephosphonic** acid, di**ethylenediaminetetramethylenephosphonic** acid, and" nitrilotrimethylene**phosphonic** acid."

Concerning the pH of the composition Severson teaches a range from 6.5 to about 10 as can be see as follows:

The compositions herein have an initial pH of from about 6.5 to about 10, preferably from about 7 to about 9, most preferably from about 7.5 to about 8.8, at a concentration of 10% by weight in water at 68.degree. F. (20.degree. C.). Preferred pH buffers include monoethanolamine and triethanolamine. Monoethanolamine and triethanolamine also further enhance enzyme stability, and preferably are included at levels of from about 0.5% to about 10%, preferably from about 1% to about 4%, by weight of the composition.

Concerning the alkali, Severson teaches several compositions in the table for example I including the use of sodium hydroxide and potassium hydroxide.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 571-272-1325. The examiner can normally be reached on 9:00-17:30 (m-f).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory E. Webb/ Gregory E. Webb

Primary Examiner, Art Unit 1796

Primary Examiner
Art Unit 1796

gew